

**Notice of Allowability**

Application No.

10/812,852

Examiner

Xiuqin Sun

Applicant(s)

DEGANI, HADASSA

Art Unit

2863

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/19/2006.
2. ☒ The allowed claim(s) is/are 87-103 and 120-126.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>12/05/2006</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                           |
|  | 9. <input type="checkbox"/> Other _____  |

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Paul Bianco on November 14, 2006 and Marty Fleit on December 05, 2006.

Replace the Claims 87-103 with the following:

--87. (Currently Amended) Computer-readable medium containing program instructions for producing a[[A]] color coded image for use in evaluating a selected place in a system in which a fluid flows, and which is characterized by a change in the system with time in space as a function of a system parameter related to system wash-in behavior and wash-out behavior at two preselected time intervals after a system event, said image depicting in two or three dimensions an image of the system in a plurality of colors, and wherein the discrete elements of the image have been coded by a color function related to system behavior at the two preselected time points to have a color hue of one of said plurality of colors indicative of the system wash-out behavior.--

--88. (Currently Amended) Computer-readable medium[[A color coded image]] as

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recited in claim 87 in which the system comprises human tissue.--

--89. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 88 in which the system comprises human breast tissue.--

--90. (Currently Amended) Computer-readable medium[[A color coded image]]as recited in claim 88 in which the system comprises two breasts.--

--91. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 87 in which the system event is defined by injection of a tracer into the fluid.--

--92. (Currently Amended) Computer-readable medium containing program instructions for producing a[[A]] color coded image for use in evaluating a selected place in a system in which a fluid flows, and which is characterized by a change in the system with time in space as a function of a system parameter related to system wash-in behavior and wash-out behavior at two preselected time intervals after a system event, said image depicting in two or three dimensions an image of the system in a plurality of colors, and wherein the discrete elements of the image have been coded by an intensity function related to system behavior before the system event and the first of the two selected time points to have a color intensity indicative of the system wash-in behavior.--

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--93. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 92 in which the system comprises human tissue.--

--94. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 92 in which the system comprises human breast tissue.--

--95. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 92 in which the system comprises two breasts.--

--96. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 92 in which the system event is defined by injection of a tracer into the fluid.--

--97. (Currently Amended) Computer-readable medium containing program instructions for producing a[[A]] color coded image for use in evaluating a selected place in a system in which a fluid flows, and which is characterized by a change in the system with time in space as a function of a system parameter related to system wash-in behavior and wash-out behavior at two preselected time intervals after a system event, said image depicting in two or three dimensions an image of the system in a plurality of colors, and wherein the discrete elements of the image have been coded by a color function related to system behavior at the two preselected time points to have a color hue of one of said plurality of colors indicative of the system wash-out behavior and have been coded by

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an intensity function related to system behavior at the system event and the first of the two selected time points to have a color intensity indicative of the system wash-in behavior.--

--98. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 97 in which the system comprises human tissue.--

--99. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 98 in which the system comprises human breast tissue.--

--100. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 99 in which the system comprises two breasts.--

--101. (Currently Amended) Computer-readable medium[[A color coded image]] as recited in claim 97 in which the system event is defined by injection of a tracer into the fluid.--

--102. (Currently Amended) Computer-readable medium containing program instructions for producing a[[A]] color coded image for use in evaluating a lesion in the breast of a subject body in which blood flows and in which a contrast agent has been injected into the blood and which is characterized by a change in the concentration of the contrast agent in the breast with time in space as a function of the contrast agent

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wash-in and wash-out behavior at two time intervals after injection of the contrast agent, said image depicting in two or three dimensions an image correlated with the said behavior, and wherein the discrete elements of the image have been color coded by a color function to have a color hue of one of a plurality of colors indicative of the contrast agent wash-out behavior and have been coded by an intensity function to have a color intensity indicative of the contrast agent wash-in behavior.--

--103. (Currently Amended) Computer-readable medium[[The color coded image]] of claim 102 wherein said behaviors are determined by two variables, K and v, wherein K defines microvascular permeability and v defines the fraction of extracellular volume which estimates the amount of free space in the breast.--

***Terminal Disclaimer***

2. The terminal disclaimer filed on 10/19/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U. S. Patent No. 6,553,327 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Allowable Subject Matter***

3. Claims 87-103 and 120-126 are allowed.

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance:

This application is rejected under double-patenting against U. S. Patent No. 6,553,327. Applicant filed a terminal disclaimer on 10/19/2006 for this case. The terminal disclaimer has been reviewed and was found as proper.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

XS  
December 7, 2006

  
MICHAEL NGHIEM  
PRIMARY EXAMINER